IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Krishnan et al.	)	
		)	
Serial No.:	10/026,003	)	
		)	Examiner:
Filed:	October 25, 2001	)	C. Shosho
		)	
For:	Publication Gravure Printing Inks	)	
	Based on Silicone Modified	)	Art Unit:
	Water-Based Emulsions	)	1714
		)	
Docket No.:	C-390	)	

Declaration Under 37 CFR 1.132

I, Robert Catena, hereby declare that:

1. I am a co-inventor of the above-mentioned patent application.

2. I have a PhD. degree in Organic Chemistry from the Polytechnic Institute of New York. I have worked in the area of inks and coatings for twenty-one (21) years. My duties at Sun Chemical have included polymer and ink development. In my current position as Technical Manager, I am responsible for flexible packaging, paper packaging, and gravure printing.

3. Based on my experience in the field of printing inks and more specifically in the field of gravure printing inks, the following is true. The above-captioned application is directed to a gravure printing ink which is comprised of pigment and an aqueous emulsion of a silicone modified macromolecular resin binder which is the reaction product of

an alkoxysilane and an aqueous emulsion polymer containing hydroxy functional groups. The alkoxy portion of the alkoxysilane reacts with the hydoxyl functionality of the polymer.

4. In respect to the Mihoya et al. reference (US Patent No. 5,719,206), I have read and understood the patent. The aqueous dispersion exemplified in Mihoya et al. is not the same as the aqueous emulsion used to produce the water-based gravure printing inks of the above-captioned patent application. Specifically, Mihoya et al. does not teach modifying solely a macromolecular resin binder. Instead, Mihoya et al. teaches modifying the surface of an inorganic particulate, *e.g.* pigment, with a silane coupling agent in the presence of a functionalized resin (*see*, column 3, lines 30-32; functionalized resins taught in column 3, lines 32-39). In doing so, the inorganic particulate is surface modified which is the primary aim of Mihoya et al. Nowhere in Mihoya et al. is an aqueous emulsion of a silicone modified macromolecular resin binder prepared by reacting an alkoxysilane and an aqueous emulsion polymer containing hydroxy functional groups.

5. Based on the foregoing, the aqueous dispersion described in Mihoya, et al., if incorporated into a printing ink, would not amount to the invention detailed in the above-captioned patent application. The formulations in Mihoya et al. would cause deleterious effects in a publication gravure printing system due to the reaction of the silane coupling agent with the pigment. In contrast, the printing ink described in the above-captioned patent application exhibits superior gloss and paper holdout, which is derived from the pigment concentration made possible by the present invention. Surface modifying a pigment, as described in Mihoya et al., would not achieve equivalent results. Thus, the aqueous dispersion taught in Mihoya et al. does not suggest the publication gravure printing ink composition of the invention.

5. I declare further that all statements made herein are of my own knowledge, are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed in Carlstadt, New Jersey, this 18 day of November, 2003

Robert Catrin